

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

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1. A treating agent for use in the Bayer process in filtration of caustic sodium alumina solution, said treating agent comprising:
a blend of starch and another polysaccharide.
- 5 2. A treating agent as claimed in claim 1 wherein the polysaccharide is selected from the group consisting of pullulan, dextran, alginic acid, zooglan, lactan or mixtures thereof.
3. A treating agent as claimed in claim 1 or 2 wherein the treating agent is dextran.
4. A treating agent as claimed in any one of claims 1 to 3 further incorporating a filter aid for assisting the filtration of the caustic sodium aluminate solution.
- 10 5. A treating agent as claimed in claim 4 wherein the filter aid is calcium aluminate.
6. A treating agent as claimed in claim 4 or 5 wherein the filter aid is a 12% aqueous suspension of calcium aluminate.
7. A treating agent as claimed in any one of the preceding claims comprising up to 10 ppm of polysaccharide and 200-300 ppm of starch.
- 15 8. A treating agent as claimed in any one of the preceding claims comprising up to 5 ppm of polysaccharide.
9. A treating agent as claimed in any one of the preceding claims wherein the polysaccharide to starch ratio is between 9:1 and 1:9.
10. An improvement in the Bayer process wherein bauxite is added to a caustic solution to produce a slurry of sodium aluminate solution and an insoluble red mud fraction which is then subjected to a thickener and separation step to produce a thickener overflow, said thickener overflow being subjected to filtration, the improvement comprising:
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providing a blend of starch and another polysaccharide to the thickener overflow as a treating agent prior to said filtration.

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11. An improvement as claimed in claim 10 wherein the polysaccharide is selected from the group consisting of pullulan, dextran, alginate, zooglan, lactan or mixtures thereof.

12. An improvement in the Bayer process as claimed in claim 10 or 11 wherein a filter aid is added to the thickener overflow to assist filtration.

13. An improvement as claimed in any one of claims 10 to 12 wherein the filter aid is calcium aluminate.

14. An improvement as claimed in any one of claims 10 to 13 wherein the filter aid is a 12% aqueous suspension of calcium aluminate.

15. An improvement as claimed in any one of claims 10 to 13 wherein the treating aid includes up to 10 ppm of polysaccharide and 20-30 ppm of starch.

16. An improvement as claimed in any one of claims 10 to 15 wherein treating agent includes up to 5 ppm of polysaccharide.

17. An improvement as claimed in any one of claims 10 to 16 wherein the polysaccharide to starch ratio in the treating agent is between 9:1 and 1:9.